NATIONAL IMAGERY TRANSMISSION FORMAT STANDARD (NITFS)
REQUEST FOR CHANGE (RFC)

RFC CONTROL NUMBER 95-009A (To be filled in by NTB Secretary)	DATE SUBMITTED 11/18/94 DATE RECEIVED 11/28/94

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PRIORITY routine	FUNCTION administrative

DOCUMENT NUMBER   MIL-STD 2500   PAGE
DOCUMENT   NITF Format   PARAGRAPH

PROBLEM DESCRIPTION
Add the DES tag name COMPUTER_FUSION_METAFILE to the NITFS.

RECOMMENDED WORDING
See attached

RATIONALE
The Joint Exploitation Module (JEM) requires the use of the Computer Fusion Metafile (CFM) as the interoperable exchange mechanism for multi-INT data, graphics and fusion results. The addition of COMPUTER_FUSION_METAFILE data

REMARKS
Add tag name to Appendix B paragraph 30.1

TOTAL COST OF IMPLEMENTATION	PROPOSED TIMEFRAME OF IMPLEMENTATION next revision

ANTICIPATED USER IMPACT

NTB REVIEW DATE   12/8/94   NTB RECOMMENDATION
SUBSTANTIVE ISSUES

DATE SUBMITTED TO ISMC   DATE SUBMITTED TO DISA
   ISMC REVIEW DATE

      ISMC DECISION   IMPLEMENTATION DATE

NITFS-CCB FORM 1(REVISION 3)

Add CFM document to section 2.1.1 under MILITARY

MIL-STD-XXXX   - Computer Fusion Metafile (CFM) for the NITFS, (Draft) 7 October 1994.

Add CFM to Acronyms in section 3.1.

3.1 <u>Acronyms used in this standard</u>. The following definitions are applicable for the purpose of this standard. In addition, terms used in this standard and defined in the FED-STD-1037B shall use the FED-STD-1037B definitions unless noted.

  a. AL   Attachment Level

  b. ANSI   American National Standards Institute

  c. ARIDPCM   Adaptive Recursive Interpolated Differential Pulse Code Modulation

  d. ASCII   American Standard Code for Information Interchange

  e. CCIR   International Consultative Committee for Radio

  f. CCITT   International Telegraph and Telephone Consultative Committee (Organized under the auspices of International Telecommunicatins Union (ITU))

  g. CFM   Computer Fusion Metafile

  . . .

Reword section 5.9.1.3 for more than two reserved encapsulated tags.

5.9.1.3 <u>Encapsulated extensions</u>. These extensions are similar to the registered extensions in that each tag has a tag, and in this case, the tag versions are registered with the NTB. Each encapsulated extension shall appear in its own Data Extension Segment (DES) and shall conform to the DES structure (5.9.1.3.1). ~~There are two reserved tags.~~ **The reserved tags**, "Registered Extensions" and "Controlled Extensions.", ~~These tags~~ are for use when a series of registered or controlled tagged record extensions is to appear in a DES (5.9.1.1 and 5.9.1.2) as "overflow" from the NITF file header of any subheader. Which header or subheader overflowed is indicated in the DESOFLOW and DESITEM field contents. Generally, the data in an encapsulated extension is user-defined. The data are anticipated to be defined typically by a specific version of a specific standard of product specification (which may of may not be under the control of the NTB). Encapsulated extensions allow the incorporation of data products in a NITF file to be disseminated along with an image. For example, Digital Terrain Elevation Data (DTED), Digital Feature Analysis Data (DFAD), or other DMA products could be distributed along with an image product to support analysis and interpretation of the image. Audio and video segments are additional axamples of data that may be added tot eh NITF through the use of Data Extension Segments.

Add the following to APPENDIX B starting at section 30.3.

30.3 <u>Encpsulated Tag Definitions</u>. The following tag definitions have been approved by the NTB and are under formal configuratuin control. The encapsulated tags, "Registered Extensions" and Controlled Extensions", are discussed in section 5.9.1.3.

30.3.1 <u>COMPUTER FUSION METAFILE tagged record extension description</u>. This definition establishes the format and defines the field values for the encapsulated tagged record extension COMPUTER_FUSION_METAFILE (CFM). The CFM tagged record supports the inclusion of a CFM into a NITF 2.0 file. The CFM provides a mechanism to electronically exchange fusion inputs, fusion processing, and fusion results. Fusion subscription, configuration, data request, data pulls, commands, and fusion results can be stored in hierarchy order with metadata associated for each level of fusion. The CFM can contain fusion objects, fusion control commands, and fusion results. These objects of results can contain raw data, derived attributed, or pointers to the raw data or derived results. The CFM is stored as a metafile containing binary data. The metafile is interpreted to divulge hierarchy fusion results.

30.3.3.1 <u>Applicable documents for COMPUTER FUSION METAFILE</u>. The following documents of exact issue shown form a part of this definition to the extent herein.

MIL-STD-XXXX (TBS)   -   Computer Fusion Metafile (CFM)
Implementation Standard for the
Joint Exploitation Module (JEM)

30.3.3.2 <u>Format Description</u>. Table B-3 defines the format for the controlled tagged record extension to the NITF bearing tag COMPUTER_FUSION_METAFILE.

<u>TABLE B-3. COMPUTER FUSION METAFILE DES field formats.</u>

FIELD	DESCRIPTION	SIZE	FORMAT VALUE	TYPE
DE	DES Identifier	2	DE	R
DESTAG	DES Name	25	COMPUTER_FUSION_METAFILE	R
DESVER	DES Version	2	01	R
DESCLAS	Classification	1	same as FSCLAS	R
DESCODE	Codeword	40	same as FSCODE	R
DESCTLH	Security Handling	40	same as FSCTLH	R
DESREL	Release Instructions	40	same as FSREL	R
DESCAUT	Classification Authority	20	same as FSCAUT	R
DESCTLN	Control Number	20	same as FSCTLN	R
DESDWNG	Downgrade Condition	6	same as FSDWNG	R
DESDEVT	Downgrade Event	40	same as FSDEVT	C
DESSHL	Subheader Length	4	0000	R
DESDATA	CFM binary data	24-999999999	binary data	R